

CLAIMS

We Claim:

1. A method for managing diseases and wellness online, the method comprising:
 - receiving patient data over a network from a user regarding a health condition;
 - filtering the patient data according to a first database to produce filtered patient data;
 - performing an analysis of the patient data; and
 - outputting, in response to the received patient data, a medical recommendation of the health condition based on a second database, wherein the medical recommendation includes what the user is suggested to do in regarding to the health condition.
2. The method of Claim 1, wherein the receiving of the patient data comprises:
 - verifying the user by looking up an account associated with the user;
 - requiring the user to set up the account if the account can not be verified; and
 - composing a number of questions based on the first database in conjunction with the account if the account can be verified.
3. The method of Claim 2, wherein the account lists the health condition about the user and wherein the first database includes common knowledge database about the health condition, the knowledge database being constantly updated with other related servers on the network.

4. The method of Claim 3, wherein the patient data includes answers from the user to the questions.

10

5. The method of Claim 1, wherein the receiving of the patient data comprises receiving diagnostic data from a diagnostic test device.

6. The method of Claim 1, wherein the patient data includes diagnostic data from a diagnostic test device.

15

7. The method of Claim 1, wherein the first database includes common knowledge database about the health condition, the knowledge database being constantly updated with other related servers on the network, and the filtering of the patient data according to the first database comprises discarding some of the patient data that are not so related to the health condition; and requesting correction or verification on other of the patient data when the other of the patient data appears abnormal according to the first database.

20

8. The method of Claim 7, wherein the analysis includes a statistical analysis and a medical analysis of the patient data.

25

9. The method of Claim 8, wherein the performing of the analysis of the patient data comprises:

30

obtaining statistical features of the patient data through the statistical analysis;

determining possible causes related to the health condition out of the patient data in conjunction with the statistical features.

10. The method of Claim 9, wherein the statistical analysis includes a fundamental statistics, a data variability analysis, and a trend forecasting.

10

11. The method of Claim 10, wherein some of the statistical features by the fundamental statistics include mean, mode, max, min, ratios and fractions to determine an appropriate sorting algorithm.

15

12. The method of Claim 10, wherein the variability analysis determines how significant the patient data is as well as the patient data is distributed.

20

13. The method of Claim 10, wherein the trend forecasting includes a projection of the patient data, computation of trends with respect to the patient data using one or more mathematical methods.

25

14. The method of Claim 13, wherein the one or more mathematical methods include one or more of linear and/or non-linear regression techniques, curve-fitting methods and numerical analyses.

30

15. The method of Claim 8, wherein the performing of the analysis of the patient data comprises, through the medical analysis, evaluating a state of the health condition using a medically related logic, risk stratification, and protocols/algorithms/guidelines that pertain to the health condition.

- 5 16. The method of Claim 15, wherein the medically related logic is a medical modeling logic that simulates a medical decision-making process and is based on general medical decision making principles.
- 10 17. The method of Claim 15, wherein the medically related logic is a medical modeling logic that is based on branch/tree logic and hash or hash-like array memory structures.
- 15 18. The method of Claim 1, wherein the second database is a medical management knowledgebase including static and/or dynamic information from multiple sources pertaining to the health condition.
- 20 19. The method of Claim 18, wherein the health condition includes one of a chronic disease and/or a health question.
- 25 20. The method of Claim 1, wherein the receiving of the patient data over the network comprises:
 - maintaining an account associated with the user; and
 - updating the account with the patient data related to the health condition.
- 30 21. A method for managing diseases and wellness online, the method comprising:
 - maintaining an account associated with a user having a health condition;
 - receiving over a network a request from the user to access the account;

5 composing a number of questions from the account after the user is
 authenticated;
 receiving data from the user in response to the questions, wherein
 the data includes answers to the questions and/or diagnostic data
 received from a diagnostic test device pertaining to the health
10 condition;
 filtering the patient data according to a first database to produce
 filtered patient data, wherein the first database includes common
 knowledge database about the health condition and is being
 constantly updated with other related servers on the network;
15 performing an analysis of the patient data; and
 providing to the user a medical recommendation of the health
 condition based on a second database, wherein the medical
 recommendation includes what the user is suggested to do in
 regarding to the health condition.

20

22. The method of Claim 21, wherein the second database is a medical
management knowledgebase including static and/or dynamic
information from multiple sources pertaining to the health condition.

25

23. The method of Claim 22, wherein the health condition includes one of a
chronic disease and a health question.

30

24. The method of Claim 21, wherein the account is maintained in a server
coupled to the network, and wherein the request is generated from a
terminal device being used by the user, the request being an IP request
including an address identifying the server.

- 5 25. The method of Claim 24, wherein the terminal device is capable of data communication with the server over the network and includes a display screen to display the medical recommendation.
- 10 26. The method of Claim 25, wherein the terminal device is selected from a group consisting of a personal computer, a network enabled cellular phones, a portable computing device and a personal digital assistant.
- 15 27. The method of Claim 24, wherein the medical recommendation is in a format of a markup language displayable on the terminal device.
- 20 28. The method of Claim 21, wherein the composing of the number of questions comprises generating the questions about the user in reference to the health condition and further in reference to the first database.
- 25 29. The method of Claim 21, wherein the performing of the analysis of the patient data comprises:
 obtaining statistic features of the patient data through the statistic analysis;
 determining possible causes related to the health condition out of the patient data in conjunction with the statistic features.
- 30 30. The method of Claim 29, wherein the statistical analysis includes a fundamental statistics, a data variability analysis, and a trend forecasting.

- 5 31. The method of Claim 30, wherein some of the statistic features by the
fundamental statistics include mean, mode, max, min, ratios and
fractions to determine an appropriate sorting algorithm.
- 10 32. The method of Claim 30, wherein the variability analysis determines
how significant the patient data is as well as the patient data is
distributed.
- 15 33. The method of Claim 30, wherein the trend forecasting includes a
projection of the patient data, computation of trends with respect to the
patient data using one or more mathematical methods.
- 20 34. The method of Claim 33, wherein the one or more mathematical
methods include one or more of linear and/or non-linear regression
techniques, curve-fitting methods and numerical analyses.
- 25 35. The method of Claim 21, wherein the performing of the analysis of the
patient data comprises, through the medical analysis, evaluating a state
of the health condition using a medically related logic, risk stratification,
and protocols/algorithms/guidelines that pertain to the health condition.
- 30 36. The method of Claim 35, wherein the medically related logic is a
medical modeling logic that simulates a medical decision-making
process and is based on general medical decision making principles.
37. The method of Claim 35, wherein the medically related logic is a
medical modeling logic that is based on branch/tree logic and/ hash or
hash-like array memory structures.

38. A machine-readable medium embodying instructions for execution by a processor, the instructions, when executed by the processor, causing the processor to produce structured documents, the machine-readable medium comprising:

10 program code for receiving patient data over a network from a user
 regarding a health condition;
 program code for filtering the patient data according to a first
 database to produce filtered patient data;
 program code for performing an analysis of the patient data; and
15 program code for outputting, in response to the received patient
 data, a medical recommendation of the health condition based on
 a second database, wherein the medical recommendation
 includes what the user is suggested to do in regarding to the
 health condition.

20 39. The machine-readable medium of Claim 38, wherein the program code
 for receiving the patient data comprises:

 program code for verifying the user by looking up an account
 associated with the user;
25 program code for requiring the user to set up the account if the
 account can not be verified; and
 program code for composing a number of questions based on the
 first database in conjunction with the account if the account can
 be verified.

30

40. The machine-readable medium of Claim 37, wherein the account lists
the health condition about the user and wherein the first database

5 includes common knowledge database about the health condition, the
knowledge database being constantly updated with other related servers
on the network.

10 41. The machine-readable medium of Claim 40, wherein the patient data
includes answers from the user to the questions.

15 42. The machine-readable medium of Claim 37, wherein the program code
for receiving the patient data comprises program code for receiving
diagnostic data from a diagnostic test device.

20 43. The machine-readable medium of Claim 38, wherein the patient data
includes diagnostic data from a diagnostic test device.

25 44. The machine-readable medium of Claim 38, wherein the first database
includes common knowledge database about the health condition, the
knowledge database being periodically updated with other related
servers on the network, and the program code for filtering the patient
data according to the first database comprises program code for
discarding some of the patient data that are not so related to the health
condition; and program code for requesting correction or verification on
other of the patient data when the other of the patient data appears
abnormal according to the first database.

30 45. The machine-readable medium of Claim 44, wherein the analysis
includes a statistical analysis and a medical analysis of the patient data.

5 46. The machine-readable medium of Claim 45, wherein the program code
for performing the analysis of the patient data comprises:
 program code for obtaining statistical features of the patient data
 through the statistical analysis; and
 program code for determining possible causes related to the health
10 condition out of the patient data in conjunction with the statistical
features.

15 47. The machine-readable medium of Claim 46, wherein the statistical
analysis includes a fundamental statistics, a data variability analysis,
and a trend forecasting.

20 48. The machine-readable medium of Claim 47, wherein some of the
statistical features by the fundamental statistics include mean, mode,
max, min, ratios and fractions to determine an appropriate sorting
algorithm.

25 49. The machine-readable medium of Claim 47, wherein the variability
analysis determines how significant the patient data is as well as the
patient data is distributed.

 50. The machine-readable medium of Claim 49, wherein the one or more
mathematical methods include one or more of linear and/or non-linear
regression techniques, curve-fitting methods and numerical analyses.

30 51. The machine-readable medium of Claim 45, wherein the program code
for performing the analysis of the patient data comprises, through the
medical analysis, evaluating a state of the health condition using a

5

medically related logic, risk stratification, and
protocols/algorithms/guidelines that pertain to the health condition.

10

52. The machine-readable medium of Claim 51, wherein the medically
related logic is a medical modeling logic that simulates a medical
decision-making process and is based on general medical decision
making principles.

15

53. The machine-readable medium of Claim 51, wherein the medically
related logic is a medical modeling logic that is based on branch/tree
logic and hash or hash-like array memory structures.

20

54. The machine-readable medium of Claim 38, wherein the second
database is a medical management knowledgebase including static
and/or dynamic information from multiple sources pertaining to the
health condition.